

CLAIMS

What is claimed is:

1. An apparatus for absorbing energy in a collapsible steering column of a vehicle in response to an excessive frontal impacting force to the steering column so that injury to the vehicle operator is reduced comprising:

an anvil for variably transmitting an amount of energy associated with collapse of a steering column by defining an axis of rotation and a plurality of different bending profiles radially spaced around said axis;

a strap for absorbing energy transmitted by said anvil by being deformable during sliding movement across one of said profiles; and

a rotating device for adjusting an amount of energy absorbed by said strap by rotating said anvil about said axis to selectively position one of said bending profiles adjacent to said strap to adjust a rate of deformation of said strap.

2. The apparatus of claim 1 wherein said anvil is further defined as including a follower portion engageable with said rotating device to rotate said anvil.

3. The apparatus of claim 2 wherein said rotating device is further defined as including an explosive charge.

4. The apparatus of claim 3 wherein said explosive charge is further defined as including first and second explosive charges disposed on opposite sides of said follower portion and said anvil being rotatable in a first direction in response to an explosion of said first explosive charge and rotatable in a second direction in response to an explosion of said second explosive charge.

5. The apparatus of claim 4 including a braking device for stopping said anvil in a desired position after one of said first and second explosion charges has exploded.

6. The apparatus of claim 5 wherein said braking device is further defined as including a pin extending from said anvil.

7. The apparatus of claim 6 including a shear pin for maintaining said anvil in a desired position prior to an explosion of one of said first and second explosion charges.

8. The apparatus of claim 7 wherein said pin is further defined as extending parallel to said axis.

9. The apparatus of claim 1 wherein said axis is further defined as extending parallel to said strap.